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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,826	10/05/2001	Takashi Nishikado	520.4011X00	8151

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EXAMINER

SUAZO, RAINIER A

ART UNIT PAPER NUMBER

2144

DATE MAILED: 08/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,826

Applicant(s)

NISHIKADO ET AL.

Examiner

Rainier Suazo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☒ Claim(s) 1-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/28/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-11 are pending in this application.
2. In applicant response claim 6 is listed as dependent on claim 6. Since claim 6 is labeled as "original", it is assumed to be dependent on claim 5.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The scope of "an individual action control means", "an individual action storage means", "an access logging instruction means" and "a hierarchical execution means", limitation is defined as the corresponding structure or material (e.g., a specific logic circuit) set forth in the written description and equivalents. See MPEP § 2181 through § 2186. Although, a claim using means plus function limitations without corresponding disclosure of specific structures or materials that are

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not well known fails to particularly point out and distinctly claim the invention. Dossel, 115 F.3d at 946-47, 42 USPQ2d at 1884-85; if, for example, the applicant discloses only the functions to be performed and provides no express, implied or inherent disclosure of hardware or a combination of hardware and software that performs the functions, the application has not disclosed any "structure" which corresponds to the claimed means. Office personnel should reject such claims under 35 U.S.C. 112, second paragraph. B. Braun Medical, 124 F.3d at 1424, 43 USPQ2d at 1899. See MPEP § 2181 through § 2186. In the instant case the specification provides no express, implied or inherent disclosure of hardware or a combination of hardware and software that performs the functions, the application has not disclosed any "structure" which corresponds to the claimed means and therefore, the metes and bounds of the claimed limitations can not be ascertained without undue experimentation. Applicant is encouraged to clarify all the means claimed in claims 1-11.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logue et al. (U.S. Patent Number 5,935,207), hereinafter referenced to as 'Logue' in

view of Cao et al (Active Cache: Caching Dynamic Contents on the Web, Proc. Of Middleware 98', Britain, September 15 1998, pp. 373-388) hereinafter 'Cao', and further in view of further in view of Shrader (U.S. Patent Number 6,272,531 B1).

Regarding claims 1 and 9-10, Logue taught a communication a communication proxy apparatus comprising an access request agent means, wherein; said access request agent means, which is placed on between a server device and client communication path devices; receives an access request an access to information data held in the server device from the client device other communication proxy apparatuses; (fig. 10 [1010], column 10 lines 58-65) issues the access request, as an agent, to the server device or still another communication proxy apparatus (fig. 10 [1030], column 10 lines 58-65 and column 11-lines 1-27); obtains the requested information data (fig. 10 [1040]); and returns the obtained data (fig. 10 [1050]) (also see column 11 lines 1-27); and processing specific information data at the communication proxy apparatus as an agent (column 5 lines 42-49 and column 10 lines 47-57 [describing a dispatcher executing actions on behalf of the client]). Logue also taught specific details regarding the instant invention in column 2 lines 19-46.

Logue did not expressly teach receiving attribute information of the information data.

Cao taught receiving attribute information of the information data related to an information request (Cao: page 2, paragraph 2).

It would have been obvious to one of ordinary skill in the art working with Logue at the time of the invention to modify Logue with the teachings of Cao, motivated by Logue to explore of the art of obtaining the requested information data (fig. 10 [1040]) from the server device or still another communication proxy apparatus (fig. 10 [1030], column 10 lines 58-65 and column 11-lines 1-27), in order to receive attribute information related to the information data (Cao: page 2, paragraph 2) in addition to the information data received from the server device or still another communication proxy apparatus (taught by Logue fig. 10 [1030], column 10 lines 58-65 and column 11-lines 1-27); improving Logue by adding the functionality of cached applets that act on the data requested by the client dynamically (Cao: page 2, paragraph 2).

Logue modified by Cao did not expressly teach further regarding the individual action control means and an individual action instruction means.

Shrader taught a communication apparatus having an individual action control means (Shrader: fig. 1[13] and column 2 lines 47-59) comprising: and individual action storage means (Shrader: column 5 lines 3-14) for holding individual action definition information indicating a relationship between the information data and action information that indicates an action to be executed (Shrader: figs. 2-3, column 4 lines 52-59 and column 5 lines 35-56) for the specific information data processed by the communication proxy apparatus as an agent (column 11 lines 48-51)[this particular limitation was also

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taught by Logue in column 5 lines 42-49 and column 10 lines 47-57]), and that indicates execution conditions of the action (fig. 3 and column 5 lines 35-56);

an individual action instruction means for registering individual action definition individual action storage means (Shrader: column 2 lines 11-42 and figs. 6, 9 and 10); and an individual action execution means for executing an individual action for the information data, which is the data obtained from the server device based on the individual action definition information under instructed conditions (Shrader: column 5 lines 35-56, column 6 lines 3-25, column 7 lines 56-59 and column 8 lines 14-23).

I would have been obvious to one of ordinary skill in the art working Logue modified by Cao, to further modify Logue modified by Cao, motivated by Logue modified by Cao to explore the art of acting upon dynamic data in an intermediary data processing systems as taught by Logue modified by Cao (Logue: fig. 10 [1030], column 10 lines 58-65 and column 11-lines 1-27; and Cao: page 2, paragraph 2). Logue modified by Cao would have resulted improved by adding user controlled actions with the teachings of Shrader related to a communication apparatus having an individual action control means (Shrader: fig. 1[13] and column 2 lines 47-59) comprising: and individual action storage means (Shrader: column 5 lines 3-14) for holding individual action definition information indicating a relationship between the information data and action information that indicates an action to be executed (Shrader: figs. 2-3, column 4 lines 52-59 and column 5 lines 35-56) for the specific information data processed by the communication proxy apparatus as an agent (column 11 lines 48-51[this particular limitation was also

taught by Logue in column 5 lines 42-49 and column 10 lines 47-57]), and that indicates execution conditions of the action (fig. 3 and column 5 lines 35-56);

an individual action instruction means for registering individual action definition
individual action storage means (Shrader: column 2 lines 11-42 and figs. 6, 9 and 10);
and an individual action execution means for executing an individual action for the information data, which is the data obtained from the server device based on the individual action definition information under instructed conditions (Shrader: column 5 lines 35-56, column 6 lines 3-25, column 7 lines 56-59 and column 8 lines 14-23).

Logue modified by Cao and further modified by Shrader is hereinafter referenced to as the first combination.

The first combination further taught, in relation to claims 9 and 10, a program load means for loading a processing in the communication proxy apparatus (Shrader: figs. 2-3, column 4 lines 52-59 and column 5 lines 35-56; and Cao: page 2 [note that a cached applet is invoked in Cao and actions (performed by software) are taken in Shrader (e.g. fig. 5)]); a program storage means for storing a loaded program (Shrader: column 2 lines 11-42 and figs. 6, 9 and 10; and cached applets in Cao are inherently stored in storage means); and an action program correlation table that holds relationship between a program entry address and action identification information (Shrader: in fig. 5 defines a series of conditional execution to trigger the actions that is commensurate with the correlation table); said program load means comprises: means for receiving an

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instruction including action identification information and to be loaded, and for program information storing the program information in the program storage means (Shrader: fig. 5 and column 7 lines 19-55).

4. Claims 2, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logue et al. (U.S. Patent Number 5,935,207), hereinafter referenced to as Logue in view of Cao et al (Active Cache: Caching Dynamic Contents on the Web, Proc. Of Middleware 98', Britain, September, 15 1998, pp. 373-388) hereinafter 'Cao', and further in view of further in view of Shrader (U.S. Patent Number 6,272,531 B1); and further in view of Amicangioli (U.S. Patent Number 6,535,509 B2) hereinafter referenced to as Amicangioli.

Logue modified by Cao and further modified by Shrader is hereinafter referenced to as the first combination.

Regarding claims 2, 7 and 8, the first combination taught the invention substantially as claimed including a proxy server wherein said individual action instruction means comprises means by which if registration in the individual action storage means containing identification data and action information to be executed for the information data, or if as a result of checking information data received by the communication proxy apparatus, found out that an individual action tag for instructing action information be executed for the information data is added the information data, individual action instructed by an explicit instruction information of target information definition

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information of the information data is registered in the individual action instruction storage according to the action information (Shrader: figs. 2-6 and 9-10; and column 5 lines 3-56, column 6 lines 3-25, column 7 lines 56-59 and column 8 lines 14-23).

However, the first combination did not teach specific details regarding including that the individual action tag control means comprises an individual action tag adding/removing means for adding the individual action tag or removing the added individual action tag, under a certain condition, when transmitting from the communication proxy apparatus the information data received by the communication proxy apparatus, and the added data received together with information data" or instruction expiration time executing instructions before the expiration time expires or and deleting action instructions as needed.

Amicangioli in the same field of invention (cache server meet the definition of proxy server), taught control means adding and removing tag information in a message transfer environment (column 11 lines 49-63 and column 14 lines 25-39). Amicangioli also taught detail regarding instruction expiration time (column 14 lines 5-25) and deleting action instructions as required (column 14 lines 12-20).

It would have been obvious to one of ordinary skill in the art working with the first combination at the time of the invention was made to modify the first combination with the teachings of Amicangioly, motivated by Logue to explore proxy servers art (column 6 lines 42-50), furthermore, Logue motivates the exploration of the art of proxy servers

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communicating with other proxy servers (column 6 lines 42-50) and Amicangioly motivates the exploration of the art of proxy servers (column 2 lines 2-5). The first combination modified by Amicangioly would have resulted improved by providing communication with other proxy servers, storage means to retain action instructions and execution means (Shrader: figs. 2-6 and 9-10; and column 5 lines 3-56, column 6 lines 3-25, column 7 lines 56-59 and column 8 lines 14-23); and further providing action instruction means storing requests under the conditions specified by the invention or other suitable conditions as needed to be executed with enhanced facility by a first and second processing unit as taught by Amicangioly in relation to processing responsively in accordance to the tags (abstract, fig. 1, column 5 lines 16-46 and column 6 lines 24-64).

Furthermore, referring to claim 7, the first limitation additionally taught wherein: the individual action control means further comprises a means for holding action expiration time information representing expiration time of the individual action definition information as the individual action definition information, and the individual action execution means comprises a means for executing an action defined by the individual action definition information before expiration time indicated by the action expiration time information, and for deleting the individual action definition information automatically after the expiration time (Cao: page 4 paragraph 3). Considering that at the time of the invention cache server were known to have expiration time for cached

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content and that such expiration would also apply to cached applets. See also, fig. 11 and column 11 lines 48-51 in Shrader, wherein a polling interval parameter is described.

Regarding claim 4, the first combination taught individual action tag adding and removing means comprising removing the tag information before a transmission wherein the tag information is not longer required, since the receiver has no need to retransmit the message, or in other words the receiver is the final destination (See Amicangioly: column 5 lines 35-46 and column 14 lines 26-38).

5. Claims 5, 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logue et al. (U.S. Patent Number 5,935,207), hereinafter referenced to as Logue in view of Clinton et al. (Proxy-Sharing Proxy Servers) hereinafter referenced to as Clinton.

Logue taught method and apparatus providing remote administrator access to access logs regarding requests serviced by a proxy server using cached data by means of logged access data.

Regarding claim 5, 6 and 11 Logue taught a communication proxy apparatus comprising receiving a user request, issuing a request on behalf of said users receiving the requested information and forwarding said requested information to the user (fig. 10 and column 5 lines 10-30); further comprising logging instruction means keeping access

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logs (fig. 4 [420] and column 5 lines 10-30); further comprising log storage means holding an access log (fig. 4 [440] and column 5 lines 10-30); and further comprising hierarchical execution means for performing proxy server behavior (it is inherited in the figure 4 that set of computer executable instruction is controlling the flow of the request to produce the request response); and further comprising timing features of access request processing for the information data(column 10 lines 4-13).

Logue did not teach specific details regarding the interaction with other proxy servers in combination with aggregating the results obtained from different proxy server before returning the result to the requesting user.

Logue motivates the exploration of the art of proxy servers communicating with other proxy servers (column 6 lines 42-50).

Clinton, in the same field of invention related to proxy servers with caching request features, taught specific details regarding the interaction with other proxy servers (proxy sharing, page 1) and aggregating the results obtained from different proxy server before returning the result to the requesting user which is inherited in Clinton since the disclosure explains that multi-level caching is conceived when proxy servers are configured to obtain their resources through other proxy servers, therefore the information obtained from said other server needs to be aggregated to produce the request response to the user.

Logue taught transferring the request to another proxy apparatus (fig. 10 [1030], column 10 lines 58-65 and column 11-lines 1-27) and Clinton taught that proxy server configured to request resources through other proxy servers compose a multi-level cache system (Clinton: page "116", paragraph 4), therefore, when Clinton forwards a request to proxy servers in closer proximity, as admitted by applicant (Remarks: page 19 paragraph 4), Clinton is in fact transmitting to a proxy in a different level that is a logical connotation of the location of the server, Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the methods/apparatus of Logue with the teachings of Clinton, motivated by Logue to explore proxy servers art (column 6 lines 42-50), in order to provide a proxy-sharing environment with aggregation features to return aggregated results to the user reducing network traffic generated by access to large WWW resources.

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 3 recites a communication proxy that includes through the indicated dependency the feature of claims 1 and 2; and further combined with an action type classification information for specifying that individual action definition information is registered according to identification information of target information data and explicit instruction of action information, or that the individual action definition information is registered by an individual action tag added to the information data; combined with the limitation that the individual action instruction means comprises a the action type classification means for registering information when individual action definition information each information data is registered in an action storage means; and tag adding/removing means comprises means for adding an individual action corresponding to the information data before transmitting the information data, when for the information data transmitted from

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the communication proxy apparatus, identification information of the information data and the individual action individual action definition information explicitly specified by action information is stored in the action storage means. The limitations of claim 3 refer in general to classifying the action definition information according to action information of the target data or according to individual action tag added to the information; combined with registration means for storing the action classification information; further combined with the manipulation of the individual action tag. Such limitations, in combination, are expressly disclosed or suggested by the cited prior art.

Response to Arguments

Applicant's arguments filed on 05/26/2005 have been fully considered but they are not persuasive.

Applicant's arguments from page 12 to 19 of the remarks, with respect to claims 1, 9 and 10 and with respect to claims 2-4, 7 and 8 have been considered but are moot in view of the new ground(s) of rejection.

Regarding arguments referencing claims 5, 6 and 11, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). It was the combination of the references that taught the limitations as addressed in the first action under 35 U.S.C. 103(a). Examiner clarifies that Logue taught transferring the request to another proxy apparatus (fig. 10 [1030], column 10 lines 58-65 and column 11-lines 1-27) and Clinton taught that proxy server configured to request resources through other proxy servers compose a multi-level cache system (Clinton: page "116", paragraph 4), therefore, when Clinton forwards a request to proxy servers in closer proximity, as admitted by applicant (Remarks: page 19 paragraph 4), Clinton is in fact transmitting to a proxy in a different level that is a logical connotation of the location of the server.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892 for details.

If further prosecution on the merits of the instant application is pursued, Applicant is encouraged to further incorporate into the independent claims the details of the instant claimed invention that help to differentiate the invention from the prior art (e.g. further elaborating the details regarding the hierarchical execution means in the independent claims and rewriting claim 3 in independent form as indicated above in reference to the indication of allowable subject matter). Applicant is further encouraged to point out where in the specifications is found the support for any future amendments to the claims.

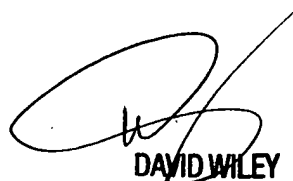
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rainier Suazo whose telephone number is (571) 272-3931. The examiner can normally be reached on Monday through Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rainier A. Suazo, MBA
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Art Unit 2144



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